												(a.E.)							
									Tem	pera	ture	(°F)							
	Calm	40	35	30	25	20	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45
	5	36	31	25	19	13	7	1	-5	-11	-16	-22	-28	-34	-40	-46	-52	-57	-63
	10	34	27	21	15	9	3	-4	-10	-16	-22	-28	-35	-41	-47	-53	-59	-66	-72
	15	32	25	19	13	6	0	-7	-13	-19	-26	-32	-39	-45	-51	-58	-64	-71	-77
	20	30	24	17	11	4	-2	-9	-15	-22	-29	-35	-42	-48	-55	-61	-68	-74	-81
3	25	29	23	16	9	3	-4	-11	-17	-24	-31	-37	-44	-51	-58	-64	-71	-78	-84
(Many / Pany)	₫ 30	28	22	15	8	1	-5	-12	-19	-26	-33	-39	-46	-53	-60	-67	-73	-80	-87
3	35	28	21	14	7	0	-7	-14	-21	-27	-34	-41	-48	-55	-62	-69	-76	-82	-89
	40	27	20	13	6	-1	-8	-15	-22	-29	-36	-43	-50	-57	-64	-71	-78	-84	-91
	45	26	19	12	5	-2	-9	-16	-23	-30	-37	-44	-51	-58	-65	-72	-79	-86	-93
	50	26	19	12	4	-3	-10	-17	-24	-31	-38	-45	-52	-60	-67	-74	-81	-88	-95
	55	25	18	11	4	-3	-11	-18	-25	-32	-39	-46	-54	-61	-68	-75	-82	-89	-97
	60	25	17	10	3	-4	-11	-19	-26	-33	-40	-48	-55	-62	-69	-76	-84	-91	-98
	For this Times 20 minutes 20 minutes																		
	Frostbite Times 30 minutes 10 minutes 5 minutes																		
	Wind Chill (°F) = $35.74 + 0.6215T - 35.75(V^{0.16}) + 0.4275T(V^{0.16})$																		
	Where, T= Air Temperature (°F) V=Wind Speed (mph) Effective 11/01/6								1/01/01										

Some best practices for prevention of cold weather injuries that MANSCEN has developed in recent years.

### COMMANDERS, LEADERS, SOLDIERS

- Balance Warrior Ethos/TRNG requirements w/Soldier Safety
- IET & Permanent Party alike

#### • **COMMANDERS**

- Reverse cycle training (outside in warmer periods of the day)
  - Amend/Postpone/Cancel training when necessary
  - Be cautious regarding prolonged exposure

Cold weather injury prevention is a command responsibility

## • **LEADERS**

- Allow "warm up" time
- Ensure that warming tents are available at all training sites
- Ensure that adequate nutrition (hot food) and hydration are provided and enforce their use
  - Ensure adequate sleep and rest
- Watch Soldiers with prior cold weather injuries, minor injuries of any kind, or on medications
  - Ensure Drill Sergeants actively check Soldiers for signs of cold weather injuries
- Ensure "Buddy System" is used, to monitor for signs/symptoms/ proper procedures

## • **LEADERS**

- Rehearse evacuation drills with cadre
- "When in doubt, evacuate"
- Realize that the initial signs of a lesser cold injury may cloud assessment of a worsening condition. Do not underestimate the possibility of a worsening condition
- When outside the cantonment area use the LMR radio to notify Range Control for evacuation
- One or more cold casualties is reason to consider additional precautions
  - Use MANSCEN Cold Weather Injury Prevention Guidance GTA

## FORT LEONARD WOOD GTA COLD WEATHER INJURY PREVENTION GUIDANCE

This GTA presents <u>recommended</u> procedures, precautions, and actions to take to prevent cold weather injuries. It should be used in conjunction with adherence to applicable regulatory requirements.

WOOD COLD CATEGORIES AND PRECAUTIONS							
COLD CATEGORY*1	PRIMARY CONCERN(S)*3	RECOMMENDED PRECAUTIONS*4					
COLD CAT 0*2 Temperature 55° to 33° F AND wet conditions (rain, snow, ice, humidity)	Trench foot Chilblain Frostnip Hypothermia	Alert personnel to the potential for cold injuries. Ensure that personnel do self-checks for signs of chilblain, frostnip, and trench foot, if outdoors for long periods. Ensure that socks are changed if feet become wet.					
COLD CAT 1 Wind chill + 32° to +1° F OR temperature of 32° F or below	Hypothermia (Moderate risk) Frostbite (Low risk IF temperature is 32° or below. No frostbite risk above 32°.)	Leaders inspect personnel for wear of cold weather clothing. Ensure face and ears are covered and dry. Ensure gloves are worn when handling equipment. Provide warm-up tents/areas and hot beverages. No facial camouflage below $32^0 F^{\circ 5}$ .					
COLD CAT 2 Wind chill 0 to -5° F	Hypothermia (High risk) Frostbite (Low risk)	Leaders inspect personnel for cold injuries. Increase the frequency of guard rotations to warming areas.  Discourage smoking. Consider outdoor PT to be Moderate Risk training (requiring approval by BN CDR).					
COLD CAT 3 Wind chill -6° to -9° F	Hypothermia (High risk) Frostbite (Moderate risk)	Consider postponing nonessential outdoor training. For mission essential operations, initiate the buddy system. Have personnel check each other for cold injuries every 30 minutes. Consider outdoor PT to be High Risk training (requiring approval by BDE CDR).					
COLD CAT 4 Wind chill -10 <sup>0</sup> to -19 <sup>0</sup> F	Hypothermia (Extremely high risk) Frostbite (High risk)	Postpone nonessential outdoor training and use buddy system for essential operations. *6 No outdoor PT. Consider outdoor training to be High Risk (requiring approval by BDE CDR)					
COLD CAT 5 Wind Chill -20 <sup>0</sup> F or below	Hypothermia (Extremely high risk) Frostbite (Extremely high risk)	Modify or curtail all but mission-essential field operations.*6					

## FORT LEONARD WOOD GTA COLD WEATHER INJURY PREVENTION GUIDANCE

#### Footnotes from page 1 of GTA

#### Notes:

- \*1 For COLD CATs 1 through 4, increase the category one level if conditions are wet (rain, snow, ice, high humidity)
- \*2 COLD CATEGORY 0 is based upon a risk of non-freezing cold injuries (chilblains, frost nip, trench foot), which can occur when conditions are cold and wet (air temperatures between 32 and 55 °F), the hands and feet cannot be kept warm and dry, and soldiers are relatively immobile.
- \*3 Descriptions of risk levels (low, moderate, high, extremely high) are intended to assist leaders in identifying relative levels of risk to personnel but should also be considered as initial risk levels for risk assessment purposes (levels prior to application of control measures).
- \*4 These are minimum recommended precautions. Leaders should consider additional precautions.
- \*5 Face camouflage obscures detection of frost bite. TB MED 508 recommends that face camouflage not be used at below
- 32° F, whereas, TRADOC Reg 350-29 says "consider not using below wind chill of 32° F; not recommended below wind chill of 10°F."
- \*6 These actions are REQUIRED by TRADOC Reg 350-29.

This GTA is available at the MSO Share Point site: https://vo.wood.army.mil/sites/Manscen/mso/default.aspx

## **INSTILL IN SOLDIERS:**

- Do not put themselves and buddies at risk by "toughing it out"
- Realize they are more valuable to their unit when healthy
- Report all personal injuries (including buddies)
- Know reporting injuries is not a sign of weakness or "telling" on buddies
- Always follow rules for cold weather injury prevention, including drinking water to prevent dehydration

Cold weather injury prevention is also an individual responsibility

## ALSO CONSIDER PREVENTION OF INDIRECTLY RELATED INJURIES AND ACCIDENTS

- Dehydration
- Constipation
- Sunburn
- Snow blindness
- Carbon monoxide poisoning
- Tent fires